

IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Michael A. Pate et al.

Confirmation No.:

Application No.:

Examiner:

Filing Date: July 31, 2003

Group Art Unit:

Title: DISPLAY DEVICE INCLUDING A SPATIAL LIGHT
MODULATOR WITH PLURAL IMAGE REGIONS

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

This Information Disclosure Statement is submitted:

- ☒ under 37 CFR 1.97(b), or
(Within three months of filing national application; or date of entry of national application; or before mailing date of first office action on the merits; whichever occurs last)
- ☐ under 37 CFR 1.97(c) together with either a:
☐ Statement under 37 CFR 1.97(e), or
☐ a \$180.00 fee under 37 CFR 1.17(p), or
(After the CFR 1.97 (b) time period, but before final action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97 (d) together with a:
☐ Statement under 37 CFR 1.97(e)(1) or (2), and
☐ a \$180.00 fee set forth in 37 CFR 1.17(p).
(Filed after final action, a notice of allowance, on or before payment of the issue fee)

Please charge to Deposit Account **08-2025** the sum of \$0.00 . At any time during the pendency of this application, please charge any fees required or credit any overpayment to Deposit Account **08-2025** pursuant to 37 CFR 1.25.

☒ Applicant(s) submit herewith Form PTO 1449 - Information Disclosure Citation together with copies, of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.

☒ A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO Form 1449, as presently understood by the individuals(s) designated in 37 CFR 1.56 (c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on form PTO 1449 and is enclosed herewith.

It is requested that the information disclosed herein be made of record in this application.

"Express Mail" label no. EV 315138508 US

Date of Deposit July 31, 2003

I hereby certify that this is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to: Commissioner for Patents, Washington, D.C. 20231.

By Christie A. Doolittle

Typed Name: Christie A. Doolittle

Respectfully submitted,

Michael A. Pate et al.

By Walter W. Karnstein

Walter W. Karnstein

Attorney/Agent for Applicant(s)

Reg. No. 35,565

Date: July 31, 2003

FORM PTO-1449 LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	ATTY. DOCKET NO. 200209409-1	APPLICATION NO.	CONFIRMATION NO.
	APPLICANT Micha I A. Pate et al.		
	FILING DATE July 31, 2003	GROUP	

REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
	1A	4,662,746	05/05/1987	Hornbeck	
	1B	4,850,685	07/25/1989	Kamakura et al.	
	1C	4,956,619	09/11/1990	Hornbeck	
	1D	4,983,032	01/08/1991	Van Den Brandt	
	1E	5,061,049	10/29/1991	Hornbeck	
	1F	5,083,857	01/28/1992	Hornbeck	
	1G	5,105,265	04/14/1992	Sato et al.	
	1H	5,157,523	10/20/1992	Yamagishi et al.	
	1I	5,264,879	11/23/1993	Shikama	
	1J	5,410,370	04/25/1995	Janssen	
	1K	5,490,009	02/06/1996	Venkateswar et al.	

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	Pages/Columns/Lines Where Relevant Passages/Figures Appear	Check if Translation attached
	1L	EP 1 001 306	05/17/2000	Olympus Optical		X
	1M	JP 60-132476	07/15/1985	Canon, Inc.		X
	1N	JP 63-292880	11/30/1988	Kawasaki		X
	1O	JP 64-47180	02/21/1989	Kawasaki		X
	1P	JP 2-216187	08/29/1990	Seiko Epson		X

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

	1Q	A. Yasuda et al., "FLC Wobbling for High-Resolution Projectors", Journal of the SID 5/3, 1997, pp. 299-305.
	1R	D. Chen, "Display Resolution Enhancement With Optical Scanners", Applied Optics, Vol. 40, No. 5, Feb. 10, 2001, pp. 636-643.
	1S	T. Tokita et al., "P-108: FLC Resolution-Enhancing Device for Projection Displays", SID 02 Digest, 2002, pp. 638-641.

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	2A	5,689,283	11/18/1997	Shirochi	
	2B	5,691,785	11/25/1997	Usui et al.	
	2C	5,842,762	12/01/1998	Clarke	
	2D	5,897,191	04/27/1999	Clarke	
	2E	5,978,518	11/02/1999	Oliyide et al.	
	2F	6,025,951	02/15/2000	Swart et al.	
	2G	6,104,375	08/15/2000	Lam	
	2H	6,113,239	09/05/2000	Sampsell et al.	
	2I	6,141,039	10/31/2000	Poetsch	
	2J	6,174,060	01/16/2001	Imaoka et al.	
	2K	6,184,969	02/06/2001	Ferguson	

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	Pages/Columns/Lines Where Relevant Passages/Figures Appear	Check if Translation attached
	2L	JP 2-250081	10/05/1990	Sony Corp.		
	2M					
	2N					
	2O					
	2P					

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

	2Q	Webpage "Profile: Emerging Technology" (www.newscenter.philips.com), 2002.
	2R	Webpage "Four Philips LCOS Televisions" (www.bluefi.co.uk).
	2S	Webpage "Projection Display Technology" (www.extremetech.com)

EXAMINER

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FORM PTO-1449

LIST OF PATENTS AND PUBLICATIONS FOR
APPLICANT'S INFORMATION DISCLOSURE
STATEMENT

(Use several sheets if necessary)

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	3A	6,191,893	02/20/2001	Bradley	
	3B	6,219,017	04/17/2001	Shimada et al.	
	3C	6,239,783	05/29/2001	Hill et al.	
	3D	6,247,816	06/19/2001	Cipolla et al.	
	3E	6,309,071	10/30/2001	Huang et al.	
	3F	6,309,073	10/30/2001	Nakayama et al.	
	3G	6,313,888	11/06/2001	Tabata	
	3H	6,384,816	05/07/2002	Tabata	
	3I	6,393,145	05/21/2002	Betrissey et al.	
	3J	6,398,364	06/04/2002	Bryars	
	3K	6,481,852	11/19/2002	Osaka	

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	3L					
	3M					
	3N					
	3O					
	3P					

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

	3Q	D. Dewald et al. "Sequential Color Recapture and Dynamic Filtering: A Method of Scrolling Color", SID 00 Digest, pp. 1-4.
	3R	
	3S	

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	4A	6,467,910	10/22/2002	Sato	
	4B	6,507,326	01/14/2003	Manabe et al.	
	4C	6,532,044	03/11/2003	Conner et al.	
	4D	Re. 36,725	06/06/2000	Sonehara et al.	
	4E	2002/0033992	03/21/2002	Den Bossche et al.	
	4F	2002/0171809	11/21/2002	Kurtz et al.	
	4G				
	4H				
	4I				
	4J				
	4K				

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